

AMENDMENTS TO THE CLAIMS

1. (currently amended) Articles prepared by extrusion, moulding and ~~combination~~combinations thereof, comprising a heterophasic polyolefin composition comprising (percent by weight):
 - 1)(1) 65-95% of a crystalline propylene polymer selected from propylene homopolymer and random co- and terpolymers of propylene with 0.1-10% of an α -olefin selected from ethylene, a C₄-C₁₀ α -olefin and a mixture thereof, the said crystalline propylene polymer being insoluble in xylene at ambient temperature in an amount over 85% and having a polydispersity index ranging from 4 to 13 and an intrinsic viscosity ([η]) value of over 2.2 dl/g; and
 - 2)(2) 5-35% of an elastomeric olefin polymer of ethylene with a C₃-C₁₀ α -olefin and optionally a diene, having an ethylene content ranging from 15 to 85% and an intrinsic viscosity ([η]) value of at least 1.4 g/ml;wherein ~~the~~a ratio of the intrinsic viscosity value of the crystalline propylene polymer (1) to that of elastomeric olefin polymer (2) ranging~~ranges~~ from 0.45 to 1.6.
2. (original) The articles of claim 1 wherein the crystalline propylene polymer has a polydispersity index from 4.5 to 12.
3. (currently amended) The articles of claim 1~~and 2~~ having a modulus of elasticity in tension higher than 2000 ~~MPa~~MPa.
4. (currently amended) Mono- or multi-layer pipes wherein at least one layer comprises a composition comprising: according to claims 1 to 3
 - (1) 65-95% of a crystalline propylene polymer selected from propylene homopolymer and random co- and terpolymers of propylene with 0.1-10% of an α -olefin selected from ethylene, a C₄-C₁₀ α -olefin and a mixture thereof, said crystalline propylene polymer being insoluble in xylene at ambient temperature in an amount over 85% and having a polydispersity index ranging from 4 to 13 and an intrinsic viscosity ([η]) value of over 2.2 dl/g; and
 - (2) 5-35% of an elastomeric olefin polymer of ethylene with a C₃-C₁₀ α -olefin and optionally a diene, having an ethylene content ranging from 15 to 85% and an intrinsic viscosity ([η]) value of at least 1.4 g/ml;wherein a ratio of an intrinsic viscosity value of the crystalline propylene polymer (1) to that

of elastomeric olefin polymer (2) ranges from 0.45 to 1.6.

5. (currently amended) ~~Mono-~~The mono- or multi-layer pipes according to claim 4, wherein the pipes are values of ring stiffness (SN) of solid wall pipes with a pipe wall thickness and smooth inner and outer surfaces, with an external diameter of ≥ 20 mm to ≤ 2000 mm pipes, satisfies and have values of ring stiffness (SN) satisfying the following mathematical relationship

$$270 \text{ kN/m}^2 \times [10/(\text{SDR}-1)]^3 \geq \text{SN} \geq 130 \text{ kN/m}^2 \times [10/(\text{SDR}-1)]^3,$$

where SDR ~~representing the~~represents a ratio of the external diameter to the pipe wall thickness.

6. (currently amended) ~~Pipes~~The mono- or multi-layer pipes according to claim 4 ~~or 5~~, in which the pipe is ~~either~~ a waste water pipe, a underground drain pipe or a buried sewage pipe.

7. (currently amended) A heterophasic polyolefin composition having a melt flow rate value up to 2 g/10 min and comprising (percent by weight):

~~1)(1)~~ 65-95% of a crystalline propylene polymer selected from propylene homopolymer and random co- and ~~terpolymer~~terpolymers of propylene with 0.1-10% of an α -olefin selected from ethylene, a C_4 - C_{10} α -olefin and a mixture thereof, ~~the said crystalline propylene~~ polymer being insoluble in xylene at ambient temperature in a percentage over 85% and having a polydispersity index ranging from 4 to 13 and an intrinsic viscosity ($[\eta]$) value of over 2.2 dl/g; and

~~2)(2)~~ 5-35% of an elastomeric olefin polymer of ethylene with a C_3 - C_{10} α -olefin and optionally a diene, having an ethylene content ranging from 15 to 85%, and having an intrinsic viscosity ($[\eta]$) value of at least 1.4 g/ml;

wherein ~~the~~a ratio of the intrinsic viscosity value of crystalline propylene polymer (1) to that of elastomeric olefin polymer (2) ~~ranging~~ranges from 0.45 to 1.6.

8. (original) The composition of claim 7 wherein the crystalline propylene polymer has a polydispersity index from 4.5 to 12.

9. (currently amended) A process ~~for producing the article of claim 1 wherein the composition according to claim 7 is extruded or moulded or both~~ comprising: extruding, moulding, or extruding and molding a composition comprising:

(1) 65-95% of a crystalline propylene polymer selected from propylene homopolymer

and random co- and terpolymers of propylene with 0.1-10% of an α -olefin selected from ethylene, a C₄-C₁₀ α -olefin and a mixture thereof, said crystalline propylene polymer being insoluble in xylene at ambient temperature in an amount over 85% and having a polydispersity index ranging from 4 to 13 and an intrinsic viscosity ($[\eta]$) value of over 2.2 dl/g; and

(2) 5-35% of an elastomeric olefin polymer of ethylene with a C₃-C₁₀ α -olefin and optionally a diene, having an ethylene content ranging from 15 to 85% and an intrinsic viscosity ($[\eta]$) value of at least 1.4 g/ml;

wherein a ratio of the intrinsic viscosity value of the crystalline propylene polymer (1) to that of elastomeric olefin polymer (2) ranges from 0.45 to 1.6.

10. (currently amended) Extruded profiles, films and sheets made from ~~the composition of~~
~~claims 7 and 8~~compositions comprising:

(1) 65-95% of a crystalline propylene polymer selected from propylene homopolymer and random co- and terpolymers of propylene with 0.1-10% of an α -olefin selected from ethylene, a C₄-C₁₀ α -olefin and a mixture thereof, said crystalline propylene polymer being insoluble in xylene at ambient temperature in an amount over 85% and having a polydispersity index ranging from 4 to 13 and an intrinsic viscosity ($[\eta]$) value of over 2.2 dl/g; and

(2) 5-35% of an elastomeric olefin polymer of ethylene with a C₃-C₁₀ α -olefin and optionally a diene, having an ethylene content ranging from 15 to 85% and an intrinsic viscosity ($[\eta]$) value of at least 1.4 g/ml;

wherein a ratio of the intrinsic viscosity value of the crystalline propylene polymer (1) to that of elastomeric olefin polymer (2) ranges from 0.45 to 1.6